If you are using a printed copy of this procedure, and not the on-screen version, then you MUST make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

13.10.1 Independent Assessment

Text Pages 2 through 7

Attachments

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials

Approved: ***Signature on File*** _____
Collider-Accelerator Department Chairman Date

D. Passarello

13.10.1 Independent Assessment

1. Purpose

1.1 To define an assessment (audit) program, which supplements BNL's Standards Based Management System (SBMS) legacy documents, or Subject Areas that relate to the Integrated Assessment Program, including the Environmental Management System (EMS). In addition, the Collider-Accelerator Department (C-A) self assessments shall verify the operational implementation of the C-A Operations Procedures Manual (OPM), and the BNL Institutional QA Program.

1.2 Definitions (for general definitions reference SBMS)

1.2.1 Finding - Results of the evaluation of the collected audit evidence compared with the agreed audit criteria. Audit findings provide the basis for the audit report. While all findings of nonconformity must be documented, findings of conformity may be documented if within the agreed upon audit scope.

1.2.2 Nonconformance - An activity, attribute, or document, which fails to comply with established requirements, and may lead to a condition having an adverse effect on quality, environment, ES&H, operations, or reliability.

- Major nonconformace - A lack of an element, procedure, or a non-fulfilled requirement that puts the process/system at jeopardy, and could lead to significant impact on quality, environment, ES&H, operations, or reliability.

- Minor nonconformance - An observed lapse in a program, process, procedure, or requirement, usually single incidents, that do not have a significant impact on the quality, environment, ES&H, operations, or reliability.

- Noncompliance - Non-adherence to an applicable regulatory requirement.

- Recommendations (opportunity for improvement) - A suggested means of improving an activity or fulfilling the intent of a requirement.

2. Responsibilities

The C-A QA Office shall implement this assessment program within the C-A complex. The C-A Quality Representative (QR) shall assess for C-A management, the quality, process, and environmental related activities within the C-A. Process and EMS assessments will be performed by C-A QA, and when appropriate, a subject matter expert. Individuals participating in C-A assessments shall be qualified per the requirements of the appropriate SBMS subject area.

3. Prerequisites

None

4. Precautions

None

5. Procedure

5.1 Schedule

5.1.1 QA shall maintain an assessment schedule. The scheduling of assessments should be flexible with the allocation of resources based on the following factors:

- Importance, status, risk, and complexity of the activity, item, or process.
- Problems encountered with the activity, or item.
- Scheduling of specific activities.
- Availability of qualified personnel.
- A review of findings reported in previous assessments.

5.1.2 Reviews performed by C-A QA which are not specified in the C-A QA Assessment Schedule are as follows:

5.1.2.1 All Enhanced Work Planning Systems within the C-A shall be reviewed at a frequency specified by the C-A Work Control Manager. As a minimum, C-A QA shall review C-A authorized work control logs for compliance to C-A-OPM 2.28, C-A-Procedure for Work Planning and Control for Operations.

5.1.2.2 QA shall ensure that an annual LOTO log review is performed by the cognizant supervisors.

5.1.2.3 Quarterly, QA shall review the gate logs, operator aids in the MCR, various logs/records maintained in the MCR, (e.g. LOTO, RS LOTO, and Temporary Procedures Log, Hand Processed Changes, and required reading records), and C-A Functional Group LOTO (i.e. Vacuum Group, Beam Components and Instrumentation Group, etc.).

5.1.2.4 As specified in C-A-OPM 2.10, Maintenance Management Policy, implementation of preventative maintenance on the fire protection system and electrical equipment/system maintenance, within the C-A facility, will be reviewed by the C-A QA Office on an annual basis. Inspection of the specific electrical equipment/system, within the C-A facility, will be verified semiannually, via a QA review of the C-A Tier One program. These QA reviews shall consist of verifying:

- Adherence to documented schedules
- Completion of required documentation
- Appropriate documentation acknowledging/approving schedule slip
- Appropriateness of specified/referenced procedures

5.1.2.5 Annually, C-A QA shall review Property Protection Areas (PPA) logs at the two locations, C-A Main Control Room (MCR), for building 911B Equipment Room entry tasks, and at Cryogenic Control Room entry area, for cryogenic entry tasks. Assure that entries are in accordance with C-A OPM 2.32, and verify that both areas retain log sheets in accordance with the BNL Site Specific Records Retention Schedule. (Ref. DOE Schedule 15 ADM-18.17.1.B Fiscal).

5.1.3 C-A shall perform an annual Environmental Management System assessment per the SBMS Subject Area. More frequent EMS assessments of specific areas or processes within the C-A complex may be appropriate, depending on the environmental importance of the activity and previous assessment results.

5.1.4 As part of the C-A EMS, C-A QA shall perform an annual regulatory compliance assessment and ensure that EMS management reviews are performed per the SBMS subject area.

5.1.4.1 The C-A Environmental Compliance Representative (ECR) shall provide C-A QA with a list of regulatory compliance requirements. The ECR shall inform C-A QA of changes to this list.

a) NESHAPs requirement 40 CFR 61, Subpart H:
   - At least one sample of target cave air (during operations with beam) in each cave which sees beam during the calendar year.
   - Water samples from cooling tower #2 submitted for rad analysis, and a radiological survey of the tower water inlet pipe during operation of C-line.

b) SBMS Storage and Transfer of Hazardous Materials subject area
   - All underground storage tanks which have cathodic protection systems must be tested annually.
   - Annual integrity tests must be performed and documented for all double-walled piping systems.

5.2 Performance

5.2.1 Emphasis will be placed on process improvement and verification of sustained effectiveness of action taken to correct previous deficiencies.

Assessments shall evaluate conformance to established requirements. That is, the examination of objective evidence demonstrating that activities, procedures, instructions, and records are being properly executed and documented.

5.2.2 Assessment criteria may be derived from the requirements appearing in the QA and Operational Procedures, SBMS Subject Areas, other relevant documents (e.g. ISO 14001), and applicable permits (e.g. work, RWP, regulatory).

5.2.3 Before conducting an assessment, the auditor shall:
- Consult with the C-A Chairman, or Associate Chair for ESHQ, in order to determine the membership of the assessment team.
- Review existing assessment documentation to verify applicability of criteria.
- Review nonconformances and recommendations documented on previous assessment reports, nonconformance reports, etc., to determine if there are known problems with an activity, or additional items that should be added to the assessment criteria.

- Confer with the person responsible for the activity and determine assessment date(s), and the names and locations of the personnel who should be contacted.
- Request information, procedures, data, etc. that will facilitate the conduct of the assessment.

5.2.4 During the assessment, verify that documentation called out by procedures and program requirements are accurate and complete. All concerns shall be brought to the attention of the person responsible for the area for possible resolution or correction prior to the completion of the audit. No corrective action will be required for any deficiency satisfactorily resolved prior to the completion of the assessment. However, a record of the concern shall be included in the assessment report, and acknowledged as having been resolved.

5.2.5 Responsible personnel are to be notified and immediate corrective action taken, as appropriate, for deficiencies that will adversely affect quality, ES&H, operations, or reliability. Interim actions may be initiated to provide needed controls while investigations and implementation of permanent corrective actions are accomplished. Follow-up assessments shall be performed to verify the effectiveness of the corrective actions.

6. Documentation

All assessment documentation shall comply with the requirements of the applicable SBMS Subject Areas.

6.1 A draft copy of the assessment report shall be distributed for preliminary review to those individuals directly involved in the assessment.

6.2 Assessment reports shall contain the concurrence of the Division Head(s) of the area assessed, ESHQ Division Head, Associate Chair for ESHQ, and the C-A Chairman. Final assessment reports issued by the C-A QA Office, shall be distributed to all signatories, the person responsible for the activity that was assessed, that person's immediate supervisor, and appropriate support organizations as required (e.g. EMS Project Manager for EMS assessments).

6.3 Assessments without major or minor nonconformances shall be considered closed when the assessment report is issued.

6.4 Assessments with documented major, and/or minor nonconformances, are considered closed when proposed corrective/preventive actions are accepted by the assessment personnel and C-A management.

6.4.1 Nonconformances, which are the result of an EMS assessment, shall be documented per the requirements of C-A-OPM 13.3.2, Nonconformance

and Corrective and Preventive Action, and the Nonconformance and Corrective and Preventive Action SBMS subject area.

6.4.2 Major and minor nonconformances shall be tracked to closure via the C-A Assessment Tracking System (ATS), per C-A-OPM 13.3.2, Nonconformance and Corrective and Preventive Action.

6.5 Assessments reports shall be maintained by the C-A QA Office. Retention time for assessment documentation shall per the requirements of C-A-OPM 13.4.1, Record Management.

7. References

7.1 C-A-OPM 2.10, Maintenance Management Policy

7.2 C-A OPM 13.3.2, "Nonconformance and Corrective and Preventative Action".

7.3 C-A OPM 13.4.1, "Record Management".

7.4 SBMS, Management System Description: Environmental Management System.

7.5 SBMS, Management System Description: Integrated Assessment Program.

7.6 SBMS, Management System Description: Quality Management.

7.7 SBMS, Environmental Assessments.

7.8 SBMS, Nonconformance and Corrective and Preventive Action.

8. Attachments

None